REMARKS

By this amendment, claim 21 (the first one) has been cancelled, claim 25 has been amended and claim 30 has been added. Claims 1-12 have been previously cancelled. Claims 13-24 and 26-30 are pending in this application, of which claims 13 and 18 are independent. No new matters are believed to be added by these Amendments.

In view of the above amendments and the following Remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Claim Objection

In the Office Action, Claim 21 was objected to because there are two claims that are numbered as claim 21. This objection is respectfully traversed because, in this response, the first claim 21 has been cancelled. Accordingly, Applicant respectfully requests withdrawal of the objection for claim 21.

Double Patenting

In the Office Action, claims 13-16, 18, 19, 21 and 24-29 stand rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1-5 of U. S. Patent No. 6,473,146. This rejection is respectfully traversed.

To obviate the double-patenting rejection, Applicant timely herewith submits a Terminal Disclaimer. Thus, withdrawal of the rejection is respectfully requested.

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Rejections Under 35 U.S.C. § 102

Claims 13-21 and 24-29 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U. S. Patent No. 5,838,400 issued to Ueda, *et al.* ("Ueda"). Applicant respectfully traverses this rejection for at least the following reasons.

With respect to claims 13-17, independent claim 13 has been amended to recite "a grounding protrusion formed on a surface of said PCB, wherein the ground protrusion is protruded higher than any other components formed on the surface". For example, in Fig. 4 of the present application, the ground protrusion 270 is protruded from the bottom surface of the PCB 210 such that only the ground protrusion 270 contacts the bottom chassis 160 while other signal patterns are prevented from accidentally contacting the bottom chassis 160.

In this regard, the Examiner asserted Ueda discloses "a grounding protrusion (frame grounds pads FGP) formed on said PCB or FPC" (Office Action, page 3). However, the Ueda does not disclose or suggest the frame ground pad FGP is a protrusion. Udea does not provide any figure or description that describes how the frame ground pad FGP is configured. Thus, the Examiner's conclusion that the frame ground pad FGP is a protrusion has no factual support from Ueda. Thus, Ueda would not be able to disclose or suggest "wherein the ground protrusion is protruded higher than any other components formed on the surface", as claimed.

For these reasons, it is submitted that Ueda fails to disclose or suggest "a ground protrusion formed on said PCB". Thus, it is submitted that claim 13 and its dependent claims 14-17 are patentable over Udea.

With respect to claims 18-21 and 24-29, independent claim 18 recites "a ground protrusion formed on a surface of the PCB, wherein the ground protrusion is protruded higher

than any other components formed on the surface". As previously mentioned, Ueda does not disclose or suggest this claimed feature. Thus, it is submitted that claim 18 and its dependent claims 19-21 and 24-29 are patentable over Ueda.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 102(b) rejection of claims 13-21 and 24-29.

Rejections Under 35 U.S.C. § 103

Claims 22 and 23 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ueda in view of U. S. Patent No. 4,705,959 issued to Kiyono, *et al.* ("Kiyono"). Applicant respectfully traverses this rejection for at least the following reasons.

Claims 22 and 23 are dependent from claim 18. As previously mentioned, claim 18 is believed to be patentable over Ueda because, for example, Ueda fails to disclose or suggest "a ground protrusion formed on a surface of the PCB, wherein the ground protrusion is protruded higher than any other components formed on the surface".

Kiyono discloses, in Fig. 1, a through hole 21 formed in the PCB 22. However, Kiyono fails to disclose or suggest "a ground protrusion formed on a surface of the PCB, wherein the ground protrusion is protruded higher than any other components formed on the surface". Since none of the cited references discloses or suggests this claimed feature, the subject matter of claim 18 would not have been obvious from the asserted combination of the cited references. Thus, it is submitted that claim 18 is patentable over them. Claims 22 and 23 are dependent from claim and hence would be also patentable at least for the same reason.

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Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 103(a) rejection of claims 22 and 23.

Other Matters

In this response, claim 30 has been newly added to cover the subject matter of the first claim 21 which was cancelled. Also, claim 25 has been amended to be consistent with claim 16.

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CONCLUSION

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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ATTACHMENT: Terminal Disclosure